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## SURFACE MOUNT DISPLAY

Part Number: ACSA02-41SYKWA-F01

Super Bright Yellow

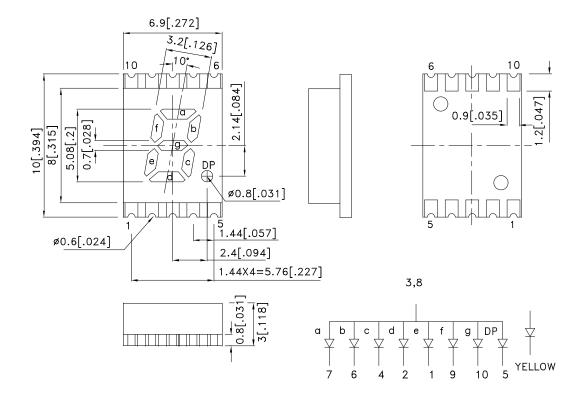
## **Features**

- 0.2inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Gray face, white segment.
- Package: 650pcs / reel.
- Moisture sensitivity level : level 2a.
- RoHS compliant.

# Description

The Super Bright Yellow device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

# **Package Dimensions& Internal Circuit Diagram**







- 1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01")unless otherwise noted.
- 2. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

  3. The gap between the reflector and PCB shall not exceed 0.25mm.

**DATE: NOV/19/2011** SPEC NO: DSAG0264 **REV NO: V.7A** PAGE: 1 OF 5 **APPROVED: WYNEC CHECKED:** Joe Lee DRAWN: D.M.Su ERP: 1351000419

# **Selection Guide**

Part No.	Dice	,		lv (ucd) [1] @ 10mA		,	Description
			Min.	Тур.			
ACSA02-41SYKWA-F01	Super Bright Yellow (AlGaInP)	White Diffused	21000	50000	Common Anode, Rt. Hand Decimal.		
			*5600	*15000			

### Note:

- 1. Luminous intensity/ luminous Flux: +/-15%.

  \* Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

# Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Yellow	590		nm	I=20mA
λD [1]	Dominant Wavelength	Super Bright Yellow	590		nm	I=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow	20		nm	IF=20mA
С	Capacitance	Super Bright Yellow	20		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Yellow	2.0	2.5	V	IF=20mA
lR	Reverse Current	Super Bright Yellow		10	uA	V <sub>R</sub> =5V

## Notes:

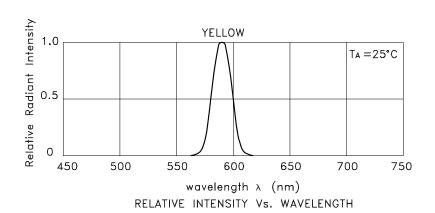
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

# Absolute Maximum Ratings at TA=25°C

Parameter	Super Bright Yellow	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	175	mA	
Reverse Voltage	5	V	
Operating / Storage Temperature	-40°C To +85°C		

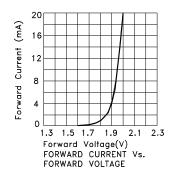
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

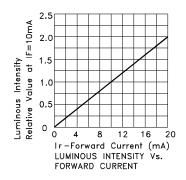
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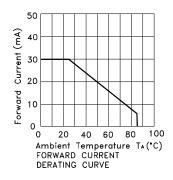


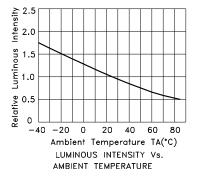
# **Super Bright Yellow**

## ACSA02-41SYKWA-F01



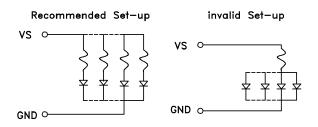






# CIRCUIT DESIGN NOTES

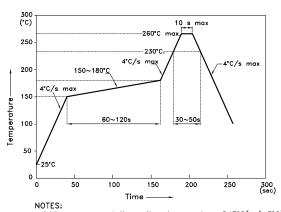
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



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## ACSA02-41SYKWA-F01

Reflow Soldering Profile For Lead-free SMT Process.



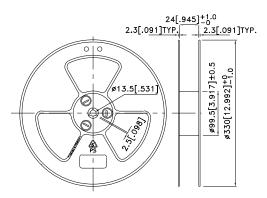
- NOTES:

  1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
   3.Number of reflow process shall be 2 times or less.

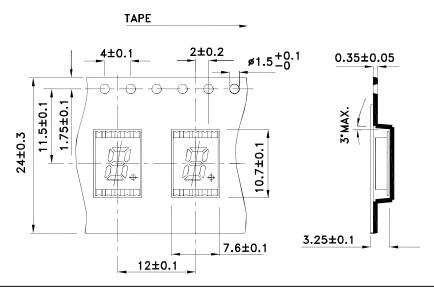
# **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.15)

# 1.44X4=5.76 0

# **Reel Dimension**



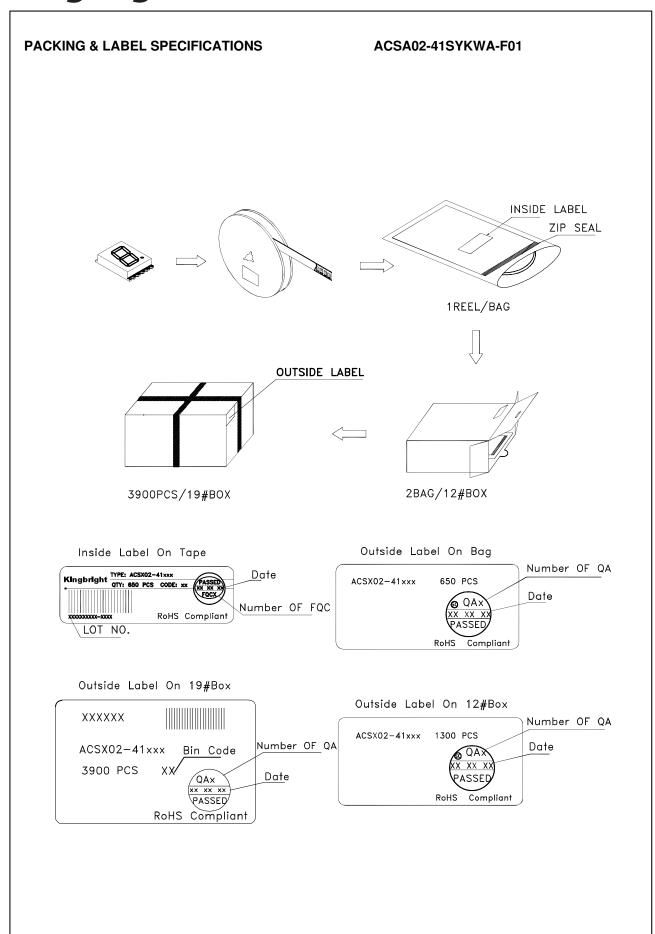
**Tape Specifications** (Units:mm)



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